To: Dermer, Michele[Dermer.Michele@epa.gov]

From: Pineda, Sonnie T

Sent: Tue 5/19/2015 5:35:00 PM

Subject: RE: Elk Hills Power Aquifer Exemption Application for Class 1 UIC

Michele,

Your request is very much involved and will need to take some time to complete. I will provide you the revised memo as soon as I received them from our geologists.

Thanks,

Sonnie T. Pineda

Sr. Environmental Advisor Elk Hills Power Plant

California Resources Elk Hills, LLC

4026 Skyline Road, Tupman, CA 93276

 $\pmb{(661)765\text{-}1805} \; \mathrm{Office} \\ \pmb{(661)} \; 770\text{-}6051 \; \mathrm{Cell} \\ \pmb{(661)} \; 763\text{-}2946 \; \mathrm{Fax} \\$

email: Sonnie.Pineda@crc.com

NOTICE New office phone number and email address



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From: Dermer, Michele [mailto:Dermer.Michele@epa.gov]

Sent: Monday, May 18, 2015 2:25 PM

To: Pineda, Sonnie T

Cc: Jim Walker; McWhirter, Lisa; Bond, Bob A

Subject: RE: Elk Hills Power Aquifer Exemption Application for Class 1 UIC Hi Sonnie, First of all I wanted to confirm that we have all received the paper copies of the AE proposal. Thank you for sending that in time for me to be able to bring it home for the three weeks of working remotely during our office move! Much appreciated. I have looked briefly at the response included from your geologist and I would be interested in the other formations below the San Joaquin. My files are all packed right now so I don't have a stratigraphic column in front of me to refer to. I would be interested in understanding the injectivity for those deeper formations and why those formations would not be suitable for Class I disposal for your operations. Most of our Class I permits are for wells much deeper than the proposed wells for Elk Hills Power, so it's not unusual for this kind of evaluation to be conducted. Would you please ask your geologist to address the deeper formations in a revised memorandum? Thanks! Sincerely, Michele From: Pineda, Sonnie T [mailto:Sonnie.Pineda@crc.com] **Sent:** Monday, May 18, 2015 11:09 AM

To: Dermer, Michele

Cc: Walker, James; McWhirter, Lisa; Garcia, Richard F; Bond, Bob A; Reid, Tony; Nelson,

David W.

Subject: RE: Elk Hills Power Aquifer Exemption Application for Class 1 UIC

Hi Michele,

Attached is the information from our Geologist regarding the injection zone.

Thanks,

Sonnie T. Pineda

Sr. Environmental Advisor Elk Hills Power Plant

California Resources Elk Hills, LLC

4026 Skyline Road, Tupman, CA 93276

(661)765-1805 Office|(661) 770-6051 Cell| (661) 763-2946 Fax

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From: Dermer, Michele [mailto:Dermer.Michele@epa.gov]

Sent: Monday, May 04, 2015 2:57 PM

To: Pineda, Sonnie T

Subject: RE: Elk Hills Power Aquifer Exemption Application for Class 1 UIC

Hi Sonnie,

Thanks for your call earlier. As we discussed, we are looking for an answer to this question from your experts as to whether there is test/data to support your statement and perhaps an explanation of what kind of information exists. Then we can discuss the need for you to provide the supporting information to EPA. Let's start with a description of what exists. Thanks.

From: Dermer, Michele

Sent: Monday, May 04, 2015 9:41 AM

To: 'Pineda, Sonnie T'

Subject: RE: Elk Hills Power Aquifer Exemption Application for Class 1 UIC

Hi Sonnie,

To clarify, I am not asking for the documentation at this moment, I am asking if there is documentation including test data to back up the statement. It is inconsistent with a Class I permit to not be injecting below the lowermost USDW and I've inquired about this before.

Thanks!

From: Pineda, Sonnie T [mailto:Sonnie.Pineda@crc.com]

Sent: Monday, May 04, 2015 9:37 AM

To: Dermer, Michele

Subject: RE: Elk Hills Power Aquifer Exemption Application for Class 1 UIC

Michele.

On this second question you sent, I forwarded this to our geologist. I am waiting for their response as well since you are asking for a documentation and test data to back up the initial response. It may take a awhile to get the information you requested.

Sonnie T. Pineda

Sr. Environmental Advisor Elk Hills Power Plant

California Resources Elk Hills, LLC

4026 Skyline Road, Tupman, CA 93276

(661)765-1805 Office|(661) 770-6051 Cell| (661) 763-2946 Fax

email: Sonnie.Pineda@crc.com

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From: Dermer, Michele [mailto:Dermer.Michele@epa.gov]

Sent: Friday, May 01, 2015 2:53 PM

To: Pineda, Sonnie T

Cc: Walker, James; McWhirter, Lisa; Bond, Bob A; Garcia, Richard F

Subject: RE: Elk Hills Power Aquifer Exemption Application for Class 1 UIC

Thanks Sonnie,

Yes, I heard the statement previously about presumed low injectivity, but is there documentation of that statement? Have you collected injectivity test data from these formations and demonstrated they are not going to be suitable – such as the San Joaquin or the Etchegoin or below (not sure what is below), the Monterey?

From: Pineda, Sonnie T [mailto:Sonnie.Pineda@crc.com]

Sent: Friday, May 01, 2015 2:38 PM

To: Dermer, Michele

Cc: Walker, James; McWhirter, Lisa; Bond, Bob A; Garcia, Richard F Subject: FW: Elk Hills Power Aquifer Exemption Application for Class 1 UIC

Michele,

From our geologist email below, "there are no suitable injection zones below the Lower Tulare. The next deepest zone that could some injectivity is the Mya zone of the San Joaquin Formation, which produces gas"

Thanks,

Sonnie T. Pineda

Sr. Environmental Advisor Elk Hills Power Plant

California Resources Elk Hills, LLC

4026 Skyline Road, Tupman, CA 93276

(661)765-1805 Office|(661) 770-6051 Cell| (661) 763-2946 Fax

email: Sonnie.Pineda@crc.com

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From: Donna Thompson [mailto:sjec@sbcglobal.net]

Sent: Friday, May 01, 2015 1:45 PM

To: Pineda, Sonnie T

Cc: Garcia, Richard F; Reid, Tony; Nelson, David W.

Subject: Re: Elk Hills Power Aquifer Exemption Application for Class 1 UIC

Sonnie:

I confirmed with Tony Reid that there are no suitable injection zones below the Lower Tulare. The next deepest zone that could some injectivity is the Mya zone of the San Joaquin Formation, which produces gas.

Donna

Sent from my iPhone

Begin forwarded message:

From: "Dermer, Michele" < <u>Dermer.Michele@epa.gov</u>>

Date: May 1, 2015 at 11:09:16 AM PDT

To: "Pineda, Sonnie T" < <u>Sonnie Pineda@crc.com</u>>

Cc: "McWhirter, Lisa" < McWhirter, Lisa@epa.gov>, "Walker, James" < Walker, James-

Doctor@epa.gov>, "Bond, Bob A" <Bob.Bond@crc.com>

Subject: RE: Elk Hills Power Aquifer Exemption Application for Class 1 UIC

Hi Sonnie,

I do have one question and it would be helpful to have a response by Monday noon. We talked about this before but I would like a considered reply from your geologic experts. You would not need an aquifer exemption if the Class I wells were drilled and completed into a formation that did not meet the definition of a USDW. In fact Class I wells as you know are normally completed below the lowermost USDW. We are interested to understand why the wells are not going to be proposed to be in a formation other than the Tulare. We would appreciate your explanation.

Sincerely,

Michele

Michele Dermer

Drinking Water Protection Section

EPA Region 9

(415) 972-3417

Dermer.michele@epa.gov

From: Pineda, Sonnie T [mailto:Sonnie.Pineda@crc.com]

Sent: Thursday, April 30, 2015 1:02 PM

To: Dermer, Michele

Cc: McWhirter, Lisa; Walker, James; Albright, David; Bond, Bob A; Hegeman, John;

Garcia, Richard F; Nelson, David W.; Reid, Tony

Subject: Elk Hills Power Aquifer Exemption Application for Class 1 UIC

Importance: High

Michele,

As we discussed on our phone conversation last Tuesday April 28, 2015, attached is the electronic copy of Elk Hills Power Aquifer Exemption application for Class 1 UIC on Elk Hills Field sections 1B and 2B. The hard copy of this application will follow. Two hard copies will be sent to you, one hard copy to Lisa McWhirther and one hard copy to James Walker. I will provide the tracking number as soon as it is available.

Thank you,

Sonnie T. Pineda

Sr. Environmental Advisor|Elk Hills Power Plant

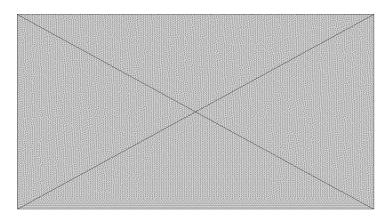
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